

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently Amended) A pressure sensor comprising an integrated circuit
2 encapsulated within a package, said integrated circuit including a pressure sensing element, an
3 opening being provided in the package allowing the pressure sensor to be exposed to the
4 atmosphere wherein a filter extends across the opening thereby preventing the ingress of
5 moisture or other ~~harmful~~ substances.
- 1 2. (Original) A pressure sensor as claimed in claim 1 wherein the
2 integrated circuit incorporates a radio frequency transponder or other means for connecting or
3 transmitting the output of the pressure sensing element to external circuitry.
- 1 3. (Currently Amended) A pressure sensor as claimed in claim 1 ~~or claim 2~~
2 wherein the filter is fixed to the surface of the package such that it extends over and covers the
3 opening.
- 1 4. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the filter is a membrane or film.
- 1 5. (Original) A pressure sensor as claimed in claim 4 wherein the filter is
2 an organic film or membrane.
- 1 6. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the sensor is adapted to be fitted to or embedded in a vehicle tyre.
- 1 7. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the integrated circuit is mounted on a lead frame.

1 8. (Original) A pressure sensor as claimed in claim 7 wherein the
2 integrated circuit and the lead frame are completely encapsulated within the package.

1 9. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the package is a conventional semiconductor package incorporating an opening.

1 10. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the package is plastic.

1 11. (Currently Amended) A pressure sensor as claimed in ~~any preceding claim~~
2 1 wherein the opening is wholly filled with gel.

1 12. (Currently Amended) A pressure sensor as claimed in ~~any one of claims 1~~
2 ~~to 10~~ claim 1 wherein the opening is partially filled with a gel.

1 13. (Original) A pressure sensor as claimed in claim ~~11 or claim 12~~
2 wherein the gel is a relatively soft gel of relatively low density.

1 14. (Currently Amended) A method of manufacturing a pressure sensor
2 comprising the steps of: providing an integrated circuit, the integrated circuit incorporating a
3 pressure sensing element; applying a quantity of gel to the integrated circuit such as to cover at
4 least the sensing element, thereby forming a gel-covered assembly; inserting the gel-covered
5 assembly into a cavity of a moulding tool, said assembly being positioned such that a portion of
6 said gel is in contact with the surface of the moulding tool; introducing a moulding compound
7 into the cavity so as to encapsulate the assembly except for the portion of gel in contact with the
8 moulding tool; removing the assembly from the cavity, whereby there is an opening defined in
9 the package encapsulating the coated assembly through which the ~~active~~ pressure sensing
10 element may be exposed to external air pressure; and affixing a suitable filter to the surface of
11 the package such that the filter extends across the opening thereby preventing the ingress of
12 moisture or other ~~harmful~~ substances.

1 15. (Original) A method of manufacturing a pressure sensor as claimed in
2 claim 14 wherein the integrated circuit is mounted on a suitable lead frame before encapsulation.

1 16. (Currently Amended) A method of manufacturing a pressure sensor as
2 claimed in claim 14 ~~or claim 15~~ wherein the gel is removed from the sensing element after
3 encapsulation but before the filter is affixed.

1 17. (Original) A method of manufacturing a pressure sensor as claimed in
2 claim 16 wherein the gel is a low cost, fast-cure gel.

1 18. (Currently Amended) A method of manufacturing a pressure sensor as
2 claimed in ~~any one of claims 14 to 17~~ claim 14 wherein the filter is affixed by means of a
3 suitable adhesive.

1 19. (Currently Amended) A method of manufacturing a pressure sensor as
2 claimed in ~~any one of claims 14 to 18~~ claim 14 wherein a projection is provided on the surface of
3 the moulding tool adapted to make contact with the gel.

1 20. (Original) A method of manufacturing a pressure sensor as claimed in
2 claim 19 wherein the projection is a removable pin.

1 21. (Currently Amended) A pressure sensor ~~according to any one of claims 1~~
2 ~~to 13~~ manufactured according to the method of ~~any one of claims 14 to 20~~ claim 14.